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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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MICHAEL CHAN  
NCR CORPORATION  
1700 SOUTH PATTERSON BLVD  
DAYTON, OH 45479-0001

EXAMINER

PAIK, STEVE S

ART UNIT	PAPER NUMBER
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2876

DATE MAILED: 01/27/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/943,160

Applicant(s)

FARQUHAR, STIVEN A.

Examiner

Steven S. Paik

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 August 2001.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All   b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)                      4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)                      5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3.                      6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-6, 8-11, 13-17 and 19-26 are rejected under 35 U.S.C. 102(b) as being anticipated by Ohwa et al. (US 5,850,079).

Re claims 1 and 9, Ohwa et al. discloses a card reader with a theft counter measure comprising:

means for defining a throat portion (card insertion portion 3a in Fig. 2) for receiving cards (2); and

means for traversing (detection lever 5 and shutter 4) the throat portion (3a) to detect any obstruction (col. 2, lines 57-58) within the throat portion (3a). The primary object of Ohwa's invention is to detect foreign matters such as a thin wire, a film, or the like inserted within a card reader to prevent card theft. Thus, his invention comprises a shutter for preventing foreign matter insertion and the like, a detection means for determining a condition of the shutter during a card reading operation and for providing an output signal of the determination and means

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responsive to the output signal for indicating that the shutter is an improper condition when foreign matter is inserted in the driving path (col. 1, ll. 32-45).

Re claims 2 and 10, Ohwa et al. discloses the reader as recited in rejected claims 1 and 9 stated above, where the arm traverses generally horizontally from one side of the throat portion (3a) to an opposite side of the throat portion. The shutter is inserted across the driving path 3b, and through holes 3d and 3e at which the detect section 5a of the detection lever is inserted along the driving path 3b (col. 3, lines 11-16 and lines 31-40).

Re claims 3 and 8, Ohwa et al. discloses the reader as recited in rejected claim 1 stated above, where the arm includes a hook portion (Figs. 4-6 and 11) on a leading edge and the hook portion is resiliently biased so that the hook portion may be deflected by, but remain in contact (col. 4, lines 5-12) with, a card (2) as the arm traverses the throat portion (3a).

Re claims 4 and 11, Ohwa et al. discloses the reader as recited in rejected claims 3 and 9 stated above, where the arm includes a cutting mechanism (4d) for cutting any unauthorized material placed in the throat portion (col. 3, ll. 34-40 and col. 4, ll. 35-37).

Re claim 5, Ohwa et al. discloses the reader as recited in rejected claim 4 stated above, further comprising a sensor (14) for detecting when the arm (detection lever 5 and shutter 4) is located at one end of the throat portion (col. 3, lines 29-33).

Re claim 6, Ohwa et al. discloses the reader as recited in rejected claim 5 stated above, further comprising another sensor (5a) for detecting when the arm (detection lever 5 and shutter 4) is located at an opposite end of the throat portion (col. 3, lines 45-50).

Re claims 13 and 19, Ohwa et al. discloses a self-service terminal (ATM) with a theft counter measure comprising:

a fascia defining a card entry slot (a slot covers a card insertion portion 3a of a card reader in Fig. 2); and

a motorized card reader module (col. 6, line 65) including (i) a throat portion for receiving a card through the card entry slot, and (ii) an arm for traversing (detection lever 5 and shutter 4) the throat portion (3a) to detect any obstruction (col. 2, lines 57-58) within the throat portion (3a). The primary object of Ohwa's invention is to detect foreign matters such as a thin wire, a film, or the like inserted within a card reader of a self-service terminal (ATM) to prevent card theft. Thus, his invention comprises a shutter for preventing foreign matter insertion and the like, a detection means for determining a condition of the shutter during a card reading operation and for providing an output signal of the determination and means responsive to the output signal for indicating that the shutter is an improper condition when foreign matter is inserted in the driving path (col. 1, ll. 32-45).

Re claims 14 and 20, Ohwa et al. discloses the terminal as recited in rejected claims 13 and 19 stated above, where the arm traverses generally horizontally from one side of the throat portion (3a) to an opposite side of the throat portion. The shutter is inserted across the driving path 3b, and through holes 3d and 3e at which the detect section 5a of the detection lever is inserted along the driving path 3b (col. 3, lines 11-16 and lines 31-40).

Re claims 15 and 16, Ohwa et al. discloses the terminal as recited in rejected claim 13 stated above, where the arm includes a hook portion (Figs. 4-6 and 11) on a leading edge and the hook portion is resiliently biased so that the hook portion may be deflected by, but remain in contact (col. 4, lines 5-12) with, a card (2) as the arm traverses the throat portion (3a).

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Re claim 17, Ohwa et al. discloses the terminal as recited in rejected claim 16 stated above, where the arm includes a cutting mechanism (4d) for cutting any unauthorized material placed in the throat portion (col. 3, ll. 34-40 and col. 4, ll. 35-37).

Re claim 21, Ohwa et al. discloses the terminal as recited in rejected claim 20 stated above, further comprising sensor means (14) for detecting when the arm (detection lever 5 and shutter 4) is located at one end of the throat portion (col. 3, lines 29-33) and detecting when the arm (detection lever 5 and shutter 4) is located at an opposite end of the throat portion (col. 3, lines 45-50).

Re claim 22, Ohwa et al. discloses a method of preventing fraud (col. 1, lines 32-35), the method comprising the steps of:

driving a member (detection lever 5 and shutter 4) to traverse a throat portion (3a) of a card reader module; and

activating an alert signal (col. 1, ll. 39-45 and col. 4, ll. 35-45) in response to detection of a failure of the member to traverse the throat portion correctly.

Method claim 23 is essentially the same in scope as apparatus claim 2 and is rejected similarly.

Re claims 24 and 25, Ohwa et al. discloses a method of operating a self-service terminal (ATM) which includes a card reader module having a throat portion (3a), the method comprising the steps of:

traversing member (detection lever 5 and shutter 4) in the throat portion (3a) of the card reader module;

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detecting when the member is unable to correctly traverse the throat portion (col. 1, ll. 39-45 and col. 4, ll. 35-45) and;

activating an alert signal (col. 1, ll. 39-45 and col. 4, ll. 35-45) upon detection of the member being unable to correctly traverse the throat portion.

Method claim 26 is essentially the same in scope as apparatus claim 14 and is rejected similarly.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 7, 12 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohwa et al. (US 5,850,079).

The teachings of Ohwa et al. have been discussed above. Although, Ohwa et al. discloses a plurality of detection signals (col. 3, line 63) sensed by detect section 5a, he does not specifically teach that the signal is detecting the state of the cutting mechanism.

However, it is obvious to include such a signal to enhance the function of the cutting mechanism to prevent a crime of fraudulent usages of a card (col. 4, lines 35-38). Ohwa et al. teaches that a trap member can be cut if soft or thin and if it is too hard or thick to be cut, the detector detects that the plate shutter is not closed. The above teaches that there is a sensor or the

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like to detect or measure the size of a trap member and whether the trap member can be cut or not.

Thus, it would have been obvious at the time of the invention was made to a person having ordinary skills in the art to incorporate the detecting mechanism to include a sensing signal to output the state of the cutting mechanism as one of the plurality of detected signal for the purpose of preventing fraudulent activities involving a card reader. Since the card reader of Ohwa et al. is already designed to produce a plurality of detection signals, incorporating such modification would be obvious matter of design variations, well within the ordinary skill in the art, therefore an obvious expedient.

### ***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Imai et al. (US 6,446,872) discloses a card reader comprising, among other things, a card inlet, card transporting device and a space for discharging foreign matter formed between the card guiding portions.

Abe et al. (US 5,949,047) discloses a dust-proof IC card reader having a foreign-matter ejection exit.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven S. Paik whose telephone number is 703-308-6190. The examiner can normally be reached on Mon - Fri (5:30am-2:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on 703-305-3503. The fax phone numbers for the



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organization where this application or proceeding is assigned are 703-746-6893 for regular communications and 703-308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0530.

*Steven Paik*

Steven S. Paik  
Examiner  
Art Unit 2876

ssp  
January 21, 2003

  
**MICHAEL G. LEE**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 2800**